

#Mouse parameters (See Model Parameters Spreadsheet for Documentation)

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parms <-c(
BW = 0.03 ,      # Body weight (kg)
QPC = 29.1 ,     # Unscaled Alveolar Vent (L/h/kg^0.75)
QCC = 20.1 ,     # Unscaled Cardiac Output (L/h/kg^0.75)

#FRACTIONAL BLOOD FLOWS TO TISSUES
QLC = 0.161 ,   # Flow to Liver as % Cardiac Output (unitless)
QFC = 0.07 ,    # Flow to Fat as % Cardiac Output (unitless)
QSC = 0.159 ,   # Flow to Slow as % Cardiac Output (unitless)
QKC = 0.09 ,    # Flow to Kidney as % Cardiac Output (unitless)

#FRACTIONAL VOLUMES OF TISSUES
VLC = 0.055 ,   # Volume Liver as % Body Weight (unitless)
VLUC = 0.0073 , # Volume Lung as % Body Weight (unitless)
VFC = 0.1 ,     # Volume Fat as % Body Weight (unitless)
VRC = 0.08098 , # Volume Rapid Perfused as % Body Weight (unitless)
VSC = 0.384 ,   # Volume Slow Perfused as % Body Weight (unitless)
VKC = 0.0167 ,  # Volume Kidney as % Body Weight (unitless)

#PARTITION COEFFICIENTS PARENT
PL = 1.26 ,     # Liver/Blood Partition Coefficient (unitless)
PLU = 2.38 ,    # Lung/Blood Partition Coefficient (unitless)
PF = 17.35 ,    # Fat/Blood Partition Coefficient (unitless)
PS = 0.59 ,     # Slow/Blood Partition Coefficient (unitless)
PR = 1.76 ,     # Rapid/Blood Partition Coefficient (unitless)
PB = 7.8 ,      # Blood/Air Partition Coefficient (unitless)
PK = 1.76 ,     # Kidney/Blood Partition Coefficient (unitless)

#KINETIC CONSTANTS
MW = 88.5 ,     # Molecular weight (g/mol)

#Revised Metabolism Constants based on Yoon report
# Metabolism in Liver
VMAXC = 99.0 ,  # Scaled VMax for Oxidative Pathway:Liver (mg/h/BW^0.75)
KM = 99.0 ,     # Km for Oxidative Pathway:Liver (mg/L)

# Metabolism in Lung
VMAXCLU = 99.0 , # Scaled VMax for Oxidative Pathway:Lung (mg/h/BW^0.75)
KMLU = 99.0 ,   # Km for Oxidative Pathway:Lung (mg/L)
KFLUC = 0.0 ,   # Pseudo-first order clearance in lung (L/h/BW^0.75)

# Metabolism in Kidney
VMAXCKid = 99.0 , # Scaled VMax for Oxidative Pathway:Kidney
(mg/h/BW^0.75)
KMKD = 99.0 ,   # Km for Oxidative Pathway :Kidney (mg/L)
KFKIC = 0.0 ,   # Pseudo-first order clearance in Kidney
(L/h/BW^0.75)

#DOSING INFORMATION
TSTOP = 7.0 ,
CONC = 0.0      # Initial concentration (ppm)
)
```